

REMARKS

Reconsideration of the application identified in caption in light of the remarks which follow is respectfully requested.

In the Official Action, claims 1, 3-7, 9-11, 13-15, 17, 19 and 21 stand rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,302,654 (*Ishii et al*) in view of U.S. Patent No. 6,204,307 (*Miyabayashi*), U.S. Patent No. 6,384,108 (*Breton et al*) and either Japanese Patent Document No. 03-231975 (*JP '975*) or U.S. Patent No. 5,508,421 (*Suzuki et al*). Claim 16 stands rejected under 35 U.S.C. §103(a) as being obvious over *Ishii et al* in view of *Miyabayashi*, *Breton et al*, and either *JP '975* or *Suzuki et al*, and further in view of U.S. Patent No. 6,406,526 (*Meyrick et al*).

Claims 1, 3-7, 9-11, 13-15, 17, 19 and 21 stand rejected under 35 U.S.C. §103(a) as being obvious over *Ishii et al* in view of *Miyabayashi*, *Breton et al*, and U.S. Patent No. 5,344,933 (*Mikoshiha et al*). Claim 16 also stands rejected under 35 U.S.C. §103(a) as being obvious over *Ishii et al* in view of *Miyabayashi*, *Breton et al*, and *Mikoshiha et al*, and further in view of *Meyrick et al*. Withdrawal of the above rejections is respectfully requested for at least the following reasons.

According to one aspect of the present invention as defined by claim 1, an ink for ink jet recording is provided. The ink comprises a colored particulate dispersion formed by dispersing, in a water based medium, colored particulates containing an oil soluble dye and a block copolymer formed from a hydrophobic segment and a hydrophilic segment; wherein the oil soluble dye is a compound represented by the general formula (I) recited in claim 1; wherein a monomer forming the hydrophobic segment is ester acrylate, ester methacrylate,

N-mono-substituted acrylamide, N-di-substituted acrylamide, N-mono-substituted methacrylamide, N-di-substituted methacrylamide, olefin, or vinyl ether; wherein the block copolymer has an ionic group selected from a carboxyl group, a sulfo group, a sulfino group, and a phosphino group, and the ionic group is present in an amount from 0.2 mmol/g or more to 5.0 mmol/g or less; and wherein an average particle diameter of the colored particulates is in a range of 1 to 500 nm.

According to another aspect of the present invention as defined by claim 19, an ink jet recording method is provided.

Ishii et al relates to the production of polymer microparticles having immobilized therein a hydrophobic substance, especially those polymer microparticles which include oil-soluble dyes or pigments for use in water-based inks (col. 1, lines 7-11).

Ishii et al does not disclose or suggest each feature of aspects of the present invention as defined by claims 1 and 19. For example, as acknowledged at pages 5 and 8 of the Official Action, *Ishii et al* does not disclose or suggest a block copolymer having an ionic group that is present in an amount from 0.2 mmol/g or more to 5.0 mmol/g or less, as recited in claims 1 and 19.

Breton et al fails to cure the above-described deficiency of *Ishii et al*. In this regard, the Patent Office has relied on *Breton et al* for disclosing the use of 2.5-15 mol% hydrophilic monomer in the polymer in order to control the particle size of the polymer (Official Action at pages 5 and 8). However, it is submitted that absent an improper resort to Applicant's own disclosure, one of ordinary skill in the art would not have been motivated to modify *Ishii et al* by employing the amount of hydrophilic monomer disclosed by *Breton et al*.

The Patent Office has asserted that one of ordinary skill in the art would have been motivated to make such modification “in order to control the particle size of the polymer.” However, *Ishii et al* already discloses means for controlling the particle size of the polymer microparticles thereof. Specifically, *Ishii et al* discloses that the particle size may be controlled within a range between 0.01 and 1 micron by selecting the polymerization condition or a suitable dispersant (col. 4, lines 11-13). The Patent Office has not provided any reason why the means disclosed by *Ishii et al* would be insufficient to control the particle size of the microparticles. As such, one of ordinary skill in the art would not have been motivated to modify *Ishii et al* in the manner suggested in the Official Action.

The Patent Office has also relied on *Miyabayashi, JP '975*, *Suzuki et al*, *Meyrick et al* and *Mikoshiha et al*. However, like *Ishii et al*, the above secondary applied documents do not disclose or suggest a block copolymer having an ionic group that is present in an amount from 0.2 mmol/g or more to 5.0 mmol/g or less, as recited in claims 1 and 19.

For at least the above reasons, it is apparent that no *prima facie* case of obviousness has been established. Accordingly, withdrawal of the above §103(a) rejections is respectfully requested.

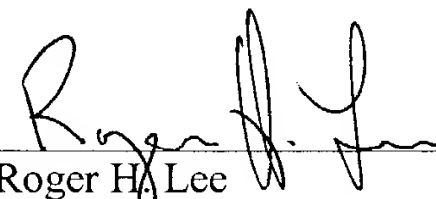
From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If there are any questions concerning this paper or the application in general, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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